Case Study

LARGEST SLIDING LED VIDEOWALL IN SWITZERLAND

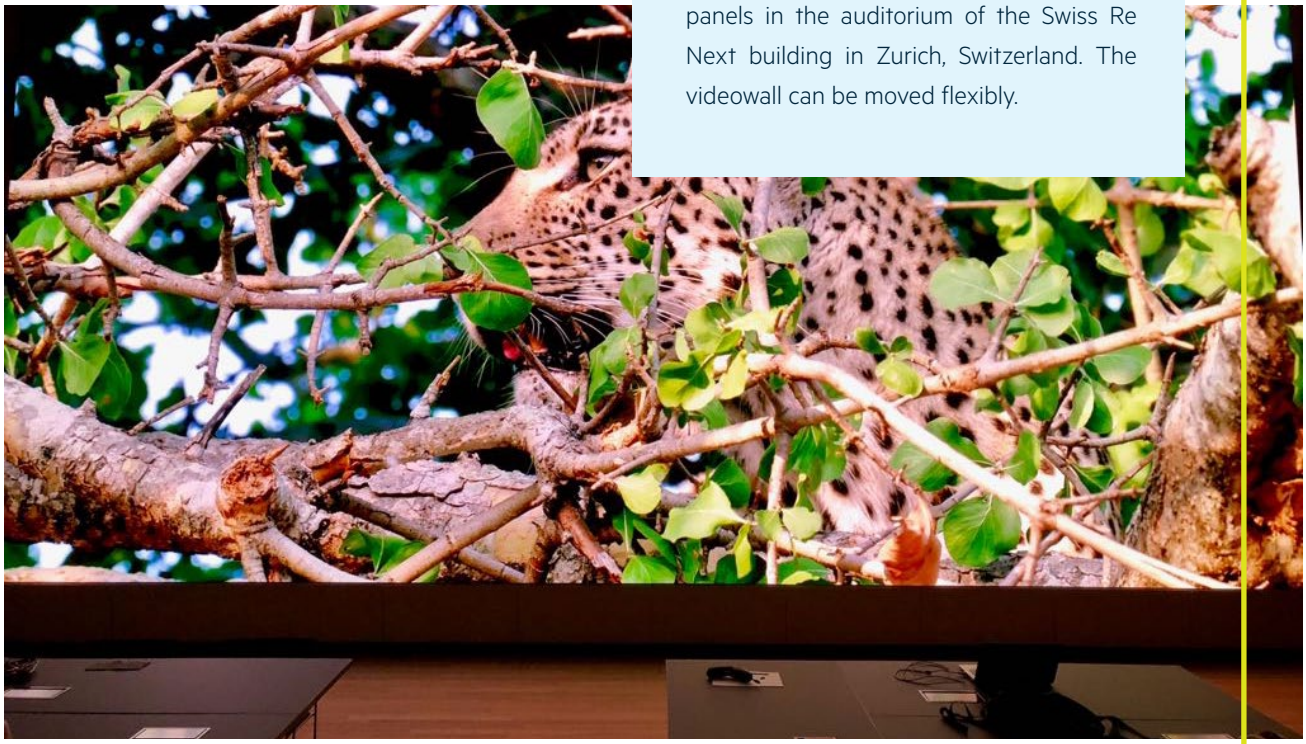
Zurich, Switzerland

Branch

Trading Floors

Project

Installation of high-resolution LED monitor panels in the auditorium of the Swiss Re Next building in Zurich, Switzerland. The videowall can be moved flexibly.



Mission

WEYTEC has installed high-resolution LED monitor panels in the auditorium of the new Swiss Re Next Building in Zurich, designed by the architects Diener & Diener. These are the largest high resolution sliding LED walls in Switzerland. The extraordinary display system adapts very flexibly to the audiovisual requirements of specific events.

Ten sliding LED monitors have been suspended from an overhead rail system. The rails run parallel to the auditorium walls, with the exception of a line that traverses the room. Installed approximately 8 cm away from the walls, the panels can be rearranged depending upon the particular use scenario (e.g. banquet, lecture, aperitif).

There is a basic difference between work and entertainment scenarios. For working meetings, the panels are pushed together to form a seamless large screen to display live video streams and powerpoint presentations. For entertainment purposes, the panels are distributed around the room and display artful ambiance images. A network of floor sockets supplies connectivity for power and signal routing.

Each monitor panel is approximately 6 m high, 1 m wide and 0.3 m deep, including a supporting construction upon which the panels are mounted. All surfaces except for the screen are fitted with covers.

Each fully equipped monitor panel weighs 650 kg, and can be moved with a force equal to only 2% of its weight, or approximately 12 kg.

Supporting structure with track system

Mission accomplished

WEY Technology met the following requirements in the fulfillment of this commission:

- Complete delivery, assembly and adjustment of 10 LED monitor panels
- Delivery, assembly and adjustment of the supporting construction
- Delivery of a locking mechanism whereby the panels are opened and closed safely with millimeter precision
- Proof of Concept (test setup with 2 complete panels)
- Deployment of the solution, including:
  - Optical calibration of all LED modules across all color channels
  - Structured image signal distribution from the receiver within the monitor panel
  - Configuration of the white balance to 4000 K and fine adjustment for optimal filming in the room
  - Configuration to individually control each LED module per monitor panel
- Project management
- Compliance with safety regulations and customer specifications regarding installation, construction and building site regulations
- Compliance with fire protection standards
- Capture of input signals and distribution to the panels

LED panels during the installation phase

Monitor panels

Monitor panels refers to the complete system, including the supporting steel structures that carry the 28 LED modules per panel, for a total of 280 modules for 10 panels, and all the other components. The LED modules are display units consisting of tiles or circuit boards equipped with LEDs.

Supporting Structure

WEYTEC was commissioned to custom design and install a complete and precisely fitting support structure for the LED panels. These are steel structures upon which the LED modules and other components are installed. The rigid construction is sufficiently flexible to ensure smooth retraction and locking procedures.

Closure technique

The panels can be neatly aligned and locked. WEYTEC developed a motorized programmable unit to control the electromechanical components and securely lock the panels.

Facts & Figures

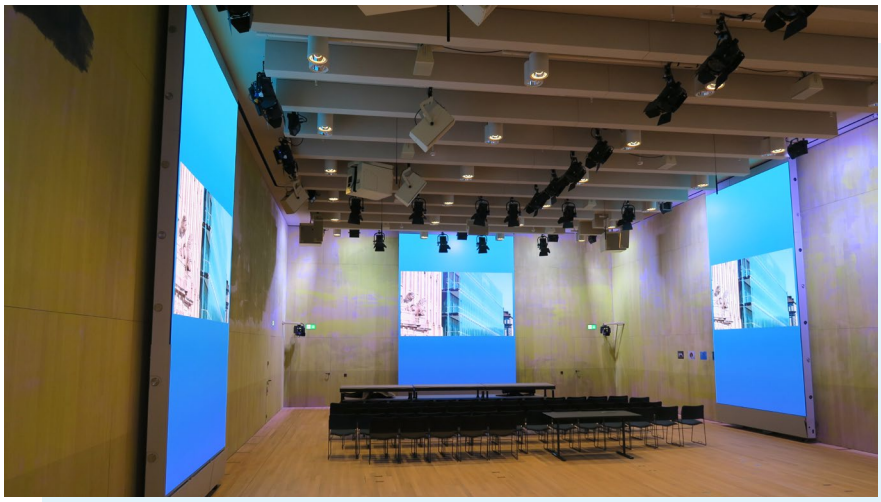
Specifications / Volume

- 10 panels, each with 28 LED modules
- Total area of LED: approx. 60 m^2
- Pixel pitch: 1.5 mm
- LED module manufacturer: eyevis
- Special requirements: The coated modules are dust and water resistent and protected against accidental contact.
- Project duration, in coordination with the building construction and regulations: 18 months
- Project completion: Q1 2018
- Order volume: > 2 mio CHF
- Maintenence contract: to be concluded, including preventative maintenance, hotline support and fast response times for on-site intervention

High light intensity across large visualization surfaces

Record of achievement

WEY Technology is uniquely positioned to offer, install and maintain customized turnkey projects with LED technology, including modules, supporting structures and control technology.



Finished auditorium on the acceptance date

High resolution images

Sliding LED walls regulate the ambiance of an event

"The Enormous Room", 2014-2017 © Helmut Federle, 2014
Foto: © Birrer Photography, 2017